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Original Communications.

CASES OF FATAL OTORRHOEA.\*

Being abstracts of a paper read before the American  
Otolological Society, July, 1871, by  
J. ORNE GREEN, M.D., Boston.

I.—*Chronic Purulent Inflammation of the Tympanum. Penetration of Pus into the Vestibule and thence through the Meatus Internus and Aqueductus Vestibuli to the Brain. Purulent Meningitis. Autopsy.*

THE autopsy, six and one half hours after death, by Dr. John Homans, revealed as follows:—

"The right external auditory meatus filled with pus.

"Head.—Convolutions of brain universally flattened; arachnoid rather dry, fluid opaque. Both ventricles contained an unusual amount of fluid, which was opaque, and at depending portions purulent. Membranes of the right half of the pons Varolii covered with a grumous deposit, and the substance of the lower part of pons and of the corresponding olivary body was broken down nearly to the wall of the fourth ventricle. Substance of the right half of cerebellum destroyed to the depth of three-fourths of an inch. Tissues in the neighborhood of the ventricles much softened. The base of the brain covered with a purulent deposit, which extended forwards to the optic commissure and over to the left side of pons.

"Thorax.—Many old splenic adhesions.

"Lungs.—Tubercular masses in both.

"Abdomen.—Tubercular masses in peritoneum. Many tubercular ulcerations in the large intestine."

Dissection of the petrous bone.—The meatus internus filled with pus, and the dura mater on its edges for the distance of half an inch dissected up, leaving the

bone bare, but not carious. On washing away the pus, the facial and auditory nerves at their exit from the meatus were distinct and apparently not affected. At the orifice of the aqueductus vestibuli, on the posterior aspect of the petrous portion of the bone, the dura mater was bulging for a space of half an inch in circumference, and pus was exuding through a small opening.

Lateral and petrosal sinuses were not affected. No caries of the bone at any point.

Roof of tympanic cavity unusually thick: this was removed and the cavity found filled with muco-purulent matter; the mucous membrane lining it was much swollen and of a livid color. Malleus whole and distinct, but no signs of the incus.

The cavity was then opened by sawing through the whole bone. The membrana tympani was much thickened by hyperæmia and swelling of its mucous lining, and was perforated both anterior and posterior to the manubrium, the anterior perforation being the larger. The malleus was normal and in normal position, but completely buried in the swollen mucous membrane.

The mucous membrane of the promontory was so swollen as nearly to fill the depressions of the fenestræ, ovalis and rotunda. No traces of the stapes could be found. Thick, adhesive, purulent matter exuded from both fenestræ, and the vestibule was completely filled with it. The cochlea was opened, was free from pus, and appeared to the eye normal. On laying open the meatus internus, the facial nerve contained in it appeared normal, but the auditory nerve was discolored and surrounded by and infiltrated with pus. The Fallopian canal, in its passage through the tympanic cavity, seemed to be only a groove, no bony wall separating it from the cavity, and the facial nerve was here only covered by the swollen mucous membrane. The inflammation had apparently not extended into the Fallopian canal. A microscopic examination of the facial nerve taken from the tympanic cavity showed no disorganization.

\* The histories of the cases are given in full in the original paper, and will appear in the Transactions of the Society. As they would occupy too much space here, only the condensed reports and autopsies are given.

The semi-circular canals contained no pus and appeared normal.

The mastoid cells were few in number, but all contained purulent matter.

The extensive breaking down of the substance of the base of the brain on the right side, and the purulent deposit there showed that this was the oldest spot of the brain-disease and its centre. The presence of pus in considerable quantity beneath the dura mater at the orifices of the meatus internus and aqueductus, and these collections only communicating with the interior of that membrane by small openings, indicated that the matter had collected there from the side next the bone, and had not penetrated from that next the brain. The bone not being carious at these points, it was necessary to look farther, and following the pus into both these passages it is traced directly into the vestibule, which, from the destruction of the stapes, communicated directly with the tympanum. Further, the part of the brain disorganized was just along the course of the auditory nerve of the affected ear, and this nerve was found throughout its course discolored.

From these facts the source of the brain disease can be distinctly traced. From ulceration of the membrane around the stapes the purulent matter of a chronic inflammation of the tympanum had penetrated the vestibule, and from here running along the only two passages communicating with the interior of the skull had emerged at the aqueductus vestibuli and meatus internus, and thus set up a fatal meningitis. A portion of the infecting matter had also probably run along the auditory nerve.

The first symptoms in the case aside from the otorrhoea of two years' standing were paralysis of the facial nerve on the affected side, followed by constant dizziness, nausea, vomiting and severe pain referred to the whole side of the head. After several days, the vomiting ceased; the severe pain in the head could not be relieved by any remedies. The right hypoglossal nerve became paralyzed. The last two days of life he was delirious, and died on the twenty-fourth day from the beginning of the head symptoms.

II.—*Acute Purulent Inflammation of the Tympanum, followed by the development of a large Polypus. Extensive Caries of the Petrous Bone. Meningitis. Autopsy.*

The autopsy, by Dr. Webber, showed, in brief, a general inflammation of the meninges of the brain, most severe at the base, with a large formation of lymph there.

From the arachnoid, covering the under surface of middle lobe on the right side, was a morbid growth resembling granulation; from the arachnoid of right lobe of cerebellum was a similar growth, through which the 9th, 10th and 11th nerves passed; the 12th nerve was not implicated. A similar and larger mass covered the whole surface of the dura mater over the petrous portion of the right temporal bone, filling nearly the whole of middle fossa of skull and passing through the foramen ovale, carotid foramen and foramen rotundum to outside of skull. The lateral sinus was implicated in a similar growth and apparently obliterated. The tissues of the neck and around the ear were infiltrated with a purulent grumous matter. The inner table of skull on right side was roughened, as in the first stages of caries. A small portion of 12th nerve, external to the skull, was examined microscopically and found entirely degenerated, no normal fibres being seen; this being probably due to the pressure of the inflammatory products where the nerve had its exit through the skull.

The right temporal bone was removed and dissected. On removing the roof of the tympanic cavity, a polypus was seen attached to the promontory and projecting into and filling the osseous meatus. The tympanic cavity contained much thick pus. No traces of any of the ossicula could be discovered. The internal ear was opened by sawing through the petrous portion of the temporal bone; the vestibule, cochlea and semicircular canals were filled with a red, solid, flesh-like mass, the membranous structures having been thus changed. The mastoid cells were filled with thick pus, and carious.

The mass described above, on the dura mater, projected slightly into the meatus internus and also into the aqueductus vestibuli. The polypus grew from the whole surface of the promontory, and was attached to no other part of the tympanum. The granulations of the meatus, seen a few days before death, had entirely disappeared, and the whole internal surface of that passage was denuded of periosteum and carious, and almost the whole anterior wall had disappeared. The walls of the carotid artery and jugular vein were thickened, but these vessels were pervious and contained no thrombi. The lateral sinus was not affected.

After maceration, the extent of the caries could be better seen. The entire wall of the meatus was carious, and a large part of the anterior wall had disappeared. The temporal bone, for the extent of one

half an inch around the meatus and roots of zygoma, was carious, being honey-combed by minute openings. The glenoid cavity was slightly carious, as was also the superior surface of the petrous bone and the wall of the lateral sinus. At the entrance of the aqueductus vestibuli was a considerable loss of bone from caries. The walls of the carotid canal were carious. The entire floor of the tympanic cavity had been destroyed by caries, and no traces of the jugular fossa existed.

A microscopic examination of the masses attached to the dura mater by Dr. J. C. Warren and myself gave a regular and imperfectly-defined net-work of connective tissue, consisting of fibres mixed with numbers of small, round cells, such as are seen in ordinary inflamed tissue; in the meshes of this stroma were larger cells, whose shape and appearance could not be made out, as the preparation had been hardened.

An examination of the polypus showed only a sarcomatous growth such as is generally found in polypi from this position. The growths from the dura mater and the labyrinth were considered the result of inflammation, but their high organization is worthy of observation.

### III.—*Acute Purulent Inflammation of the Tympanum. Abscess over the Mastoid. Death. No Autopsy.*

On being received into the hospital, the patient was apparently suffering from a very severe inflammation of the middle ear only, with abscess over the mastoid; the brain symptoms were not present. On opening the abscess, the bone was not softened or carious, nor did it become so later. The inflammation in the ear seemed to be doing well, the pain was very much less, and the discharge from the tympanum was diminishing till fifteen days after entrance, when, without any appreciable change in the ear, he began to complain of pain in the occiput, which seemed to yield to quinine and was thought at the time to be neuralgic. Inflammation in the neck followed. The occipital pains returned for ten days, then ceased so that he was about the ward. The pains then returned all over the head, accompanied by vomiting; both these symptoms continued, the pain increased rapidly in intensity during the last few days of life, and he died in general tonic convulsions eleven weeks after entrance. His strength continued fair till one week before death, when it failed rapidly.

The diagnosis would seem to be either meningitis or abscess of the brain, the pur-

lent matter penetrating in some of the ways to be described.

### IV.—*Chronic Purulent Inflammation of the Tympanum, with a large Polypus. Abscess and Caries of the Mastoid. Caries of the Meatus Externus and probably of the Petrous Bone. Death from Disease of the Brain, seven weeks from the beginning of the serious Symptoms. No Autopsy.*

### V.—*Chronic Purulent Inflammation of the Tympanum. Caries of the Mastoid Cells communicating with both the Brain and the Meatus Externus, but not connected with the Tympanum. Abscess of the Brain over the Carious Spot.*

On laying open the bone, a sinus was found through the upper osseous wall of the meatus, just above and external to the small process of the hammer. This opening was large enough to admit the point of an ordinary probe, and communicated with the meatus externally and with the small cavity in front of the head of the hammer internally. From this cavity it passed backwards and inwards towards the mastoid process into a circular cavity about one fourth of an inch in diameter in the cancellated structure of the bone, and the roof of bone over this cavity had entirely disappeared, so there was a direct communication with the brain. All the walls of this cavity were irregular and carious. The membrana tympani was entire and apparently healthy, of normal transparency and thickness in every part below the small process of the hammer. From the manner in which the bone had been opened, the insertion of the upper edge of the membrane had been removed, so that it was impossible to speak of the condition in which the so-called membrana Shrapnelli was, whether whole or perforated. The head of the hammer and the whole incus were wanting, but whether lost from disease or during the dissection cannot be said.

The point of interest in the case is the peculiar caries of the bone associated with an unperforated and apparently healthy membrana tympani, the caries in the cancellated structure of the bone having destroyed the wall of the meatus on the one side and the roof which separated it from the brain on the other, and yet not having communicated with the tympanic cavity or injured the membrana tympani.

The possibility of such accidents as occurred in this case can be easily explained by looking at sections of a normal bone, where it will be seen that but a thin lamina

of firm bone separates the cancellated structure from the cavity of the skull and from the meatus. The small cavity, a part of the tympanum, above and external to the head of the hammer, it will be seen, is separated from the meatus by an extremely thin lamina of bone, and within two years Troeltsch has directed special attention to this cavity by a specimen which he dissected and in which he found this plate of bone perforated, and through the perforation a polypoid growth from the mucous membrane projected into the meatus.

That a purulent inflammation of the tympanum could be fatal without perforating the membrana tympani was proved in a case of Trütsch's, in which the roof of the tympanum was opened and a fatal meningitis set up, and yet the membrana tympani remained entire. This case which I have described is, however, as far as I know, the only one recorded where a caries communicating with the meatus and with the brain had proved fatal without injuring the membrana tympani, and is of importance when we consider how little would have been seen during life by examination, and how necessary it is to bear in mind the possibility of such perforations in searching for the source of a purulent discharge in the meatus.

That a purulent discharge from the ear might in some rare cases cause necrosis of the bone in which that organ is imbedded, and that this necrosis might cause fatal trouble in the brain, has been recognized for a very long time by pathologists. That such a purulent otitis might become the direct cause of death without the bone becoming diseased has, however, been known only of late years. The dissection of pathological specimens has, however, shown that necrosis is not the only thing to be feared in these cases, but that without the petrous bone being affected the disease of the ear may be the direct cause of death.

The anatomical relations of the ear, as shown by the most recent investigations, prove that the ear is in more intimate connection with the brain and other important parts than had been supposed. By means of the microscope and fine injections it has been shown that the numerous small foramina with which the petrous portion of the temporal bone is perforated furnish passages through which an inflammation may extend *ex contiguo* to other parts.

The whole upper and inner surfaces of the bone lie in direct contact with the meninges of the brain, being covered with the dura mater which here serves as a perioste-

um and nourishes the bone. Part of the upper surface forms the roof of the tympanum, is variable in thickness, but frequently so thin as to be nearly transparent.

The lateral sinus, a fold of the dura mater and like it serving as a periosteum, is only separated from the mastoid cells by a thin lamella of bone, through which many minute foramina pass directly into the cells. These mastoid cells form part of the tympanum. The facial nerve in its Fallopiian canal passes directly through the tympanum, is never separated from that cavity by more than a very delicate, bony plate, and frequently, from a deficiency in this, probably due to an arrest of development, lies in direct contact with the mucous membrane lining the tympanum.

The floor of the tympanum is formed by the jugular fossa in which lies the internal jugular vein; in this floor is a foramen through which a branch of the vagus passes into the tympanum. Occasionally here also, from an arrest of development, the coverings of the jugular vein lie in direct contact with the mucous membrane of the tympanum. The anterior wall of the tympanum is formed by the carotid canal, is so thin that light passes readily through it and is moreover perforated by foramina, through which the tympanic branches of the sympathetic pass from the carotid plexus to the tympanum.

The meatus internus gives a large canal from the cavity of the skull to the labyrinth of the ear, and this latter is only separated from the tympanum by the thin membranes covering the fenestra, ovalis and rotunda. This large passage is lined by a prolongation of the dura mater, which serves as its periosteum. The aqueductus vestibuli also connects the interior of the skull with the cavity of the labyrinth and serves for the passage of a small vein.

The petrosal mastoid canal leads from the mastoid cells to the interior of the skull, thus furnishing still another communication from a different part of the tympanum to the brain. It serves for the passage of a vein which has been followed into the superior petrosal sinus, so that we have here the circulation of the tympanum in direct communication with that of the meninges of the brain.

Without speaking of the different forms requiring various modifications of treatment, all of the serious otorrhoeas consist essentially of a purulent inflammation of the mucous membrane lining the tympanum, with a marked tendency to ulceration. This ulceration may, and usually does destroy



the membrana tympani, making the meatus and tympanum one cavity, and it may destroy either or both the membranes of the fenestræ leading to the labyrinth, thus exposing that cavity. From these two cavities, tympanum and labyrinth, we have seen that there are various avenues leading to the brain and other important parts. The ulceration is liable to attack the bone, causing absorption, and we have seen that but very thin, osseous plates separate the tympanum from the carotid canal, the jugular vein, the transverse sinus and the facial nerve, and these bony plates, even in their normal condition, are perforated by foramina.

An examination of the recorded cases shows that all of the relations of the ear which I have mentioned are attended with danger. By far the most frequent accident seems to be a perforation of the thin roof of the tympanum and the extension of the inflammation *ex contiguo* on to the dura mater, causing a meningitis or suppuration of the substance of the brain directly above the perforation. The penetration of the purulent matter into the labyrinth, by ulceration through the fenestræ and thence along the meatus internus or aqueductus vestibuli, is also a not infrequent cause of meningitis or abscess of brain. Tröltzsch, moreover, records a case where a fistula had been produced by ulceration directly through the bone from the tympanum into the labyrinth, without destruction of the membranes of the fenestræ, and thence the inflammation had extended to the brain, the patient dying of meningitis of the base.

The petrosal-mastoid canal would undoubtedly, on careful examination, be a more frequent source of communication than is supposed. Voltolini has described a case, fatal from purulent meningitis, in which this canal was much enlarged from inflammatory softening and the dura mater around it intensely inflamed. He was not at that time aware that this passage conveyed a vein to the petrosal sinus, and no mention is made of the condition of the sinus. Tröltzsch has also given a case where the inflammation, extending along this passage, had caused phlebitis of the superior petrosal sinus, and this had given rise to a pachymeningitis and two abscesses in the brain.

Occasionally the transverse sinus becomes inflamed from the mastoid cells, and Tröltzsch found this sinus filled with a thrombus which had led to metastasis in the lungs. Hemorrhage from this sinus, either external into the tympanum and meatus or

internal into the cavity of the skull, has occasionally occurred from an extension of an inflammation from the mastoid cells, and Wreden has described a case, fatal from two perforations of this sinus, through one of which the hæmorrhage was external and through the other internal; he has likewise given a synopsis of eighteen such perforations from various authors.

An inflammation of the jugular vein may occur in the same manner as in the transverse sinus, the inflammation extending from the tympanum through its floor to the jugular fossa. In Virchow's lecture-room, some years ago, I remember seeing a very marked case of this kind, where the floor of the tympanum was largely perforated, and the internal jugular vein intensely inflamed and filled with a large thrombus, which had led to metastatic deposits in different internal organs. The inflammation here may also take an ulcerative form, and the vein thus be perforated, causing a venous hæmorrhage through the external meatus or Eustachian tube.

The carotid artery is liable to the same injuries as the jugular vein and transverse sinus. It has been found inflamed and obliterated by a firm clot, and quite a number of cases are reported where it has been perforated, and the patients have died from arterial hæmorrhage. In a few cases where such a hæmorrhage occurred and the lesion was diagnosed, ligature of the common carotid was performed with success.

Affections of the facial nerve from inflammation of the tympanum are by no means rare; the absence or perforation of the thin plate separating the Fallopiian canal from that cavity allowing the inflammation to extend along the sheath of the nerve, or else allowing the swollen mucous membrane to press directly on the nerve, causing a paralysis of all the parts supplied by it. So far as I know, however, no cases are reported of an extension of the inflammation along this passage to the brain.

In addition to these different forms of disease in which the connection with the ear can be distinctly traced, it is now generally accepted that any suppuration may be the exciting cause of pyæmia, and that an inflammation of the substance of a bone is especially liable to lead to this. One or more abscesses in the brain, remote from the ear and surrounded by healthy tissue, are sometimes found, for which no other cause than a suppuration of the ear can be found, and Tröltzsch with other writers have considered that the circulation was the channel which carried the exciting

cause of the abscess, be it a minute embolus or putrid matter, from the ear. On this subject Trötsch remarks:—"Not only the true diplos but the bone of the os temporis in general is in direct connection, by means of its bloodvessels, with the dura mater on the one hand and with the soft parts of the ear on the other. The temporal bone in general receives its vessels from within and from without, and also sends them in both directions, not only to dura mater, but also to the membranes lining the outer and middle ear. Diseases of the latter produce abnormal conditions in the bone and its vessels which, either through the contents, or along the tissue of the walls of the bloodvessels, pass into the dura mater and there call up secondary pathological processes. These announce themselves in the one case as purulent inflammations of the brain membranes or of the walls of the sinuses, in another by clot-formation and closure of the calibre of the vessels, or by the entrance of putrid matter into the circulation. That all these processes developing themselves within or on the vessels can be produced by the purulent inflammation of the soft parts of the ear without the existence of a 'caries of the petrous bone,' cannot often enough be impressed upon the practitioner, since many are inclined to fear only a 'caries of the petrous bone,' not, however, a simple otorrhœa or purulent inflammation of the soft parts of the ear."

#### EMPHYSEMA DURING LABOR.

By JAMES O. WHITNEY, M.D., Pawtucket, R. I.

THE case of emphysema published in the JOURNAL of Nov. 9th, reminds me of a case of this nature that occurred in my practice some years since. My patient was a robust young woman in her first labor, which was very severe and protracted. The irruption of air took place in the night, and was momentarily attended with some difficulty of breathing; it was so extensive as to nearly or quite close the eyes, reaching to all parts above the waist, where it was arrested in its downward progress by the tightness of the clothes. I assured my patient and her friends that it would spontaneously disappear in a few days, which prediction was fully verified. There was no soreness whatever. I attended this patient in a subsequent labor, which was severe also, but nothing of the kind happened again. A rupture at the navel, however, took place, and there remains to this day a troublesome umbilical hernia. The first confinement

was a case of single birth; the second, twin birth. She never afterwards became pregnant, though having good health, with the exception mentioned, as to the hernia, which has occasioned paroxysms of colic, at times severe. Like Dr. Mackenzie, I had then seen no reference to this complication of parturition in works on obstetrical science; but in Cazeaux's work (1868) may be found an article on "Pulmonary and Subcutaneous Emphysema," by which it appears that cases like mine are "still more rare" than where the air spreads to the face and neck only, and "may occasion oppression and threaten suffocation," as happened to my patient to some extent. A case proving fatal in forty-six hours after delivery, is also recited and published by M. Depaul, where the air diffused itself "through the intervesicular, interlobular and subpleural cellular tissue, invading both lungs without passing beyond them. The autopsy revealed emphysema of the cellular tissue of both lungs." It seems that Dr. Mackenzie overlooked this most important reference to the subject.

November 10, 1871.

### Reports of Medical Societies.

SELECTIONS FROM THE RECORDS OF THE OBSTETRICAL SOCIETY OF BOSTON.  
SECRETARY, D. F. LINCOLN, M.D.

JANUARY 14th, 1871.—Dr. William Read, First Vice-President, in the chair.

*Propriety of Inducing Labor in Cases of Albuminuria in Pregnancy.*—Dr. Read asked whether induced labor is justifiable in cases like the following, and under what circumstances it may be justified:—

A lady, pregnant for the second time, and within five weeks of the full term, had occasional attacks of loss of sight, and mental confusion; her legs were cedematous half-way up the thighs, and she was passing urine, two-thirds full of albumen, frequently, but in very small quantities. The specific gravity was not taken, nor was any microscopic examination made; there was no urinous odor in the breath. The skin of the legs was cracked by the distention. In view of the urgency of the mental symptoms, for the patient declared she felt as though about to lose her mind, it was proposed by Dr. Putnam (who had been called in consultation) and himself to induce premature labor. She refused to allow the

operation, and sent for another physician; while he and his associate were stigmatized as abortionists for proposing the operation.

Drs. Lyman and Cotting were inclined to question the expediency of this measure, and thought that it would be likely of itself to bring on convulsions.

Dr. Abbot suggested that diuretics should be tried before the question of the induction of labor is considered.

Dr. Sinclair was on general principles in favor of Dr. Read's practice, in cases like that reported, but would try the effects of diuretics before resorting to the induction of premature labor. If we wait for convulsions to occur, it is at our own risk.

*Cephalic Version by external Manipulation in a case of Foot Presentation.*—Dr. Abbot reported the case.

He was called to attend Mrs. — in her tenth labor, the patient having a short antero-posterior pelvic diameter, and all her previous labors, with one exception, having been difficult, requiring manual or instrumental interference to effect delivery. The labor pains were very strong and expulsive, and, on examination, the membranes were found to be unbroken, very tough and thick, and projecting very low down in the vagina. The os was well dilated, and a foot was found projecting from it. As the patient's previous obstetric history had shown that the chances of life for her children were better with a head than a foot presentation, it was determined to attempt cephalic version by external manipulation. This operation was favored by the large amount of liquor amnii, the uterus being greatly distended. The child's head and nates could be distinctly made out through the abdominal walls. Moderate pressure being made over these parts simultaneously, a hand being placed upon each, the position of the child was easily reversed, and the head brought into its normal place without introducing the hand into the uterus or vagina. The operation was surprisingly easy, and must have been accomplished in less than a minute, the fetus turning like a specimen in a bottle. The head did not at once enter the brim of the pelvis, but lodged a little above the pubes, requiring one hand to be kept in the vagina to guard against prolapse of the cord, while pressure was applied externally to direct the head into the cavity of the brim. This was soon effected, and labor progressed as it had previously done in the case of this patient. It was soon apparent that the short antero-posterior diameter was

an impassable obstacle without assistance, and it was determined to use forceps. The head was fully engaged in the superior strait, but not locked, as it could be easily moved by the hand in the intervals of pains. With each contraction it came down to a certain point, where it stopped, although the expulsive action was very powerful. At the end of an hour the forceps was applied, and the child was delivered with much difficulty, the extraction being greatly prolonged and requiring the united strength of two to accomplish it, applied by means of a towel folded longitudinally and passed above the lock of the forceps between the blades, so as to be a powerful means of traction in addition to the handles of the instrument. After the head was born, the delivery of the shoulders required the same outlay of strength as the head. The child was very large, a male, and was dead at birth.

Notwithstanding the difficulty of the labor, the patient was quite comfortable the next day, and said she felt well enough to get out of bed and go about as usual. No untoward symptoms occurred, and her recovery was rapid.

During the course of the labor, Dr. Edwin A. W. Harlow, who kindly assisted in the delivery, called Dr. Abbot's attention to a cicatrized opening in the posterior lip of the uterus. This was detected before the forceps was applied, and at that time was of an oval form, with smooth, rounded edges, an inch or more in diameter, and not tender to the touch. Probably this was the result of pressure in some one of the previous labors.

The previous obstetrical history of this patient is interesting, and has been related in this JOURNAL, at page 97, vol. lxxix., and page 342, vol. lxxvi. of the old series. Summarized, it is as follows:—

First child, a boy, delivered by craniotomy, being dead before the operation was commenced.

Second child, a girl, born at the seventh month, by induced labor, living.

Third child, a boy, partial placenta prævia; child born dead.

Fourth child, a boy, delivered living by the feet; breech presentation.

Fifth child, a girl, born living at full term; delivered with difficulty by forceps.

Sixth child, a girl, born after a short and natural labor, without the least assistance. Child not weighed, but apparently as large as the previous ones.

Seventh child, a boy, born dead, having

been delivered with great difficulty; breech presentation. The delivery of the head was much delayed.

Eighth child, a boy, stillborn. A hand and foot presented, and cephalic version was accomplished by internal manipulation. Delivery was effected by forceps, but the child was dead.

Ninth child, a girl; normal presentation; delivery by forceps, child living.

Tenth child, a boy, the subject of the present communication.

It is noticeable that all the boys in the above enumeration were stillborn but one, while all the girls were born living.

The case of the tenth child is interesting in connection with the question as to the amount of force justifiable in extraction by forceps. In this case the united strength of two physicians was employed, with slight intermission, for an hour (counter-extension being made by two men), before delivery could be effected; yet no harm was done to the mother, who is still living, a well and very active woman.

mode of administering ether were then described, and it was shown that if these were attended to, the production of anaesthesia by ether was as easy and certain as by chloroform, and required but little more expenditure of time or the drug. The only cases to which ether was not so applicable were operations upon the mouth, in which the inhaler could not be used, and where it was necessary to re-administer the anaesthetic as rapidly as possible without an inhaler. There were two appendices to the paper: the first consisting of a table of fatal cases of chloroform; the second, of a table of ninety-seven cases in which the author had administered ether, including amputations, excisions, perineal section, lithotomy, lithotrity, staphyloraphy, operations on vesicovaginal fistula, ligature of piles and other operations. Especial note was taken of the occurrence of after-sickness, and the only approach to it was that in one case, after an operation for recto-vesical fistula, the patient vomited once, an hour after the operation.

The president remarked that the author had omitted to notice the recommendation of the Committee of the Royal Medical and Chirurgical Society, to mix chloroform and ether.

Mr. Spencer Wells thought that there were grounds for not carrying out this recommendation. In Vienna, where the plan of mixing chloroform and ether had been tried, it had been found that the patients first got the effects of the ether (the lighter fluid), and were then suddenly overpowered by the chloroform. He had long felt that there were serious objections to chloroform in operations involving the abdomen, on account of the persistent vomiting which was liable to follow its administration. He had, following the example of Dr. Keith, of Edinburgh, given ether in some cases; but good ether was scarce, and the diffusion of the vapor through the air gave rise to inconvenience. After four years' experience, in more than three hundred cases, he had found bichloride of methylene to possess great advantages over both ether and chloroform. It was safer than chloroform; and after-sickness was rare. It might be administered from a graduated bottle, by having air forced through it by means of bellows. About four deaths had been reported to have followed its use; while, from the quantity sold, it was estimated, that it had been given in 50,000 or 60,000 cases. Perhaps, however, even a better anaesthetic than the bichloride of methylene would yet be discovered.

## Selected Papers.

### ETHER AND CHLOROFORM AS ANÆSTHETICS.

By J. WARRINGTON HAWARD, F.R.C.S.

At a meeting of the Royal Medical and Chirurgical Society, a paper was read by Mr. Haward, which commenced by stating that, it having been suggested to the author that the statements of Dr. Bigelow and other American surgeons showed that ether as an anæsthetic had been to our detriment neglected, he had, during the past year, practically investigated the subject, and had arrived at the conclusion that ether was, for several reasons, to be preferred to chloroform. Of these reasons, the strongest was the greater safety of ether; for by using it the chief, and in skilled hands probably the only, cause of fatal cases of chloroform inhalation was excluded—*i. e.*, paralysis of the heart; ether being a stimulant to the heart's action, and uniformly improving the pulse. The second was that ether, from its stimulant quality, was antagonistic to the effects of the shock of an operation, which the author maintained, and quoted cases to show, was not abolished by rendering the patient insensible. A third was the greater liability of chloroform than ether to produce after-sickness. The principles and

Dr. W. H. Day gave an account of the characters of bichloride of methylene, as described by Dr. Richardson. It produced less sickness than chloroform; and the patients recovered more quickly from the anæsthesia which it produced—the agent being readily eliminated. For an operation lasting half an hour, three drachms of the bichloride of methylene were generally sufficient.

Dr. C. Kidd preferred administering ether and chloroform separately. Thus it proved a good plan to place the patient at first well under the influence of chloroform, and continue the anæsthesia with ether in a separate inhaler, especially if the pulse became weak from shock or bleeding. Ether alone was very tedious; three or four ounces of chloroform would do as much as almost a pint of ether. As to the pulse, he agreed with Lister that it was very little influenced by chloroform. Sabarth gave thirty-six deaths under ether, so that it was not entirely devoid of danger. As to bichloride of methylene, it was suitable for short operations, but for long operations he considered it dangerous.

Dr. Sansom said that there were not sufficient data for estimating the relative dangers of chloroform and ether. The statistics as to chloroform differed widely; some giving the deaths as one in 16,000, and others as one in 2,500. The rate of mortality from ether was also variously given; but there was sufficient to show that it was not absolutely safe. Chloroform was more manageable than ether; on account of its nauseousness, many persons could not tolerate the latter. The danger of chloroform, in his opinion, lay in its diminishing the power of the circulation. From experiments which he had made, he agreed with Mr. Wells as to the effect of mixtures of ether and chloroform. When, however, chloroform was mixed with alcohol, it was not merely diluted, but its volatilization was retarded, and a more free admixture of air was allowed. In many cases, a small quantity of morphia might be injected hypodermically, and then a smaller amount of chloroform would be required.

Mr. Holmes had tried ether some years ago. He did not think that there was any difficulty in bringing patients under its influence, though it required about twice as much time as chloroform. There was no necessity for any diffusion of the vapor in the room; the window might be kept open. The chief reason why he abandoned the use of ether was that, when given by a sponge (as was ordinarily the case), it produced

asthenic congestion and convulsive movements, especially in patients addicted to drinking. It was useless to imagine that a perfectly safe anæsthetic could be found. As to the statistics of death after the use of anæsthetics, these were of no use, unless it were shown in each case whether the agent was administered judiciously or injudiciously. If ether were given in a proper manner, there was no objection to it, and no inconvenience of importance attended its use.

Mr. R. B. Carter had inhaled ether experimentally in 1848, and remembered that the taste of it remained for two or three days.

Mr. C. Hunter agreed with Dr. Sansom that the danger with chloroform arose from its effect on the heart. If morphia were injected, it was necessary to look to the lungs as much as to the heart.

Mr. Clover was at University College Hospital when ether was first used there by Mr. Liston. He remembered that there were many cases of sickness after its use; and he had not found it so free from this result as had been alleged. It was difficult to breathe ether freely, on account of its pungency. Statistics were not trustworthy; and it must be remembered that cases in which chloroform was given in midwifery (its full effect not being produced) were not fairly comparable with those in which it was given for the performance of great operations, such as lithotomy. Much would depend, also, on the distance from the face at which chloroform was given. If the inspired air contained more than five per cent. of the vapor, there was marked tendency to produce death by syncope.—*British Med. Journal.*

#### SESQUICHLORIDE OF IRON AS A PROPHYLACTIC OF ACUTE RHEUMATISM.

By Dr. ANSTIE.

A CONSIDERABLE space of time has now elapsed since the announcement, by Dr. Russell Reynolds, of his observations on the successful treatment of acute rheumatism by large and frequent doses of the tincture of sesquichloride of iron. I do not know to what extent this plan of treatment has become generalized; but there have been a good many reports in the medical journals of its employment in different hospitals; and the balance of evidence derivable from these seems distinctly favorable to the method. My own experience of it in fully declared acute rheumatism has not been large.



I have treated six cases altogether with the sesquichloride, and in four of these I think the results distinctly bore out the main assertions of Dr. Reynolds as to the prompt relief of the pains, the limitation of the extent of mischief, and the shortening of the illness; in the other two, the medicine seemed to have no special effect. But it is not of the use of the sesquichloride in fully developed acute rheumatism that I now wish to speak. My opportunities of seeing disease on a large scale being chiefly those afforded by the out-patient room, it is rather the first advancements and threatenings of acute rheumatism, than the declared disease, that I am in the habit of seeing. A considerable number of persons present themselves in my out-patient room, in the course of twelve months, suffering from the preliminaries of acute rheumatism; it is one of the small group of really serious diseases (amongst a much larger variety of trivial complaints) which occupy one's attention in out-patient practice, and was formerly a matter of great dissatisfaction to me, from the apparently almost total failure of remedies to produce any effect. Whereas threatenings of gout could be very commonly dealt with in such a manner as to prevent the attack, or render it trivial, the onset of acute rheumatism seemed never to be averted by drugs when once the prodromata had reached the stage which pretty frequently presented itself before me, viz., a more or less obscure aching of several joints,\* a yellow sallowness of face, with patches or streaks of dusky redness, blanket-like furring of tongue, an oily moisture of skin, a distinct though slight elevation both of pulse and temperature, and a certain anxiety of respiration. So far as the history of such patients could be traced, they were almost invariably found to have developed the full symptoms of the acute disease, and very often (after once seeing them in the out-patient room) one encountered them, a few days later, in a ward of the hospital.

Very different have been the results of treatment since I adopted the use of full doses of sesquichloride of iron from the first moment of such cases presenting themselves. During the past twelve months I have done this fully. Whenever a patient has presented himself with articular pain and slight fever that were plainly of the rheumatic and not of the gouty type, he has been at once placed on thirty or forty minimis doses of the tincture of sesquichlo-

\* I have, on the contrary, known pain in or near a single joint (stimulating neuralgia) with slight fever, sallow skin, &c., yield to iodide and bicarbonate of potash.

ride, from three to six of which, according to the severity of the symptoms, have been given in each twenty-four hours. I have several times called the attention of the students to the fact that (unlike what used to happen) these cases now reappear in my out-patient room on my next hospital day; and in the great majority of instances declare themselves greatly relieved. Since July, 1870, I have treated twenty-nine such patients, of whom thirteen had previously had one or more regular attacks of rheumatic fever, for the symptoms now referred to, with the full doses of iron; and of these, seventeen have lost all pyrexia and spontaneous joint-pain within the three or four days elapsing before my next day at the hospital. Only three have, under my own eyes, developed the full acute disease, and been sent into the ward. Of the remaining nine, four disappeared altogether from my knowledge, so that I cannot say what became of them; the other five, though their symptoms were checked, remained in a state of what might be described as sub-acute rheumatism during from 10 to 22 days.

I cannot help remarking with emphasis on the contradiction of old ideas which is involved in the effect of this iron treatment upon the furred tongue. Of course it becomes speedily blackened; but so far from the furring increasing, or the dryness and foul taste becoming more pronounced, what commonly happens is, that after a few days the epithelial coating falls off in considerable patches, and the tongue soon cleans altogether. I believe the prophylactic treatment of rheumatism by the sesquichloride to be one of our most valuable recent improvements in medicine.—*The Practitioner*.

**IODIZED MILK.**—From Hoffman's most admirable report on the "Progress of Pharmacy, 1869," we make the subjoined extract, which has a practical value for the physician: "It is well known that milk takes up iodine, disguising its taste, smell, and color, completely; since iodine is an antiseptic, iodized milk keeps for some time. Dr. Hagar calls attention to this fact, and suggests that this, perhaps, is the mildest form of administering iodine. Its therapeutic effect seems to be equal, only, to about one-fifth of the iodine. Hagar thinks iodized milk will soon become a favorite form of administering iodine, and suggests the following mode of preparation: One part of iodine dissolved in ten parts of alcohol, admixed with ninety parts of fresh, warm, cow's milk.—*Med. Press and Circular*."

# Medical and Surgical Journal.

BOSTON: THURSDAY, NOVEMBER 30, 1871.

## PHOTOGRAPHING HISTOLOGICAL PREPARATIONS BY SUNLIGHT.

In January, 1870, Dr. Woodward, Assist. Surgeon U.S.A., submitted a report in which he detailed the results of a series of experiments, which showed the superiority of the electric and magnesium lights over sunlight, as heretofore employed, for the production of photo-micrographs of the soft tissues. In June of the same year he made a report in which he showed that similar results could be obtained with the oxy-calcium light. With these various artificial sources of light he obtained pictures which appeared to him to be "clearer and better defined than any photographs of similar objects he had hitherto seen produced by sunlight."

These reports were editorially noticed in the JOURNAL for November 10, 1870.

During the early part of 1871, however, Dr. Woodward occupied himself with photographing the soft tissues, using for illumination the light of the sun, and he has arrived at results which have to a certain extent modified the conclusions of his former reports, principally in the direction of improved methods for obtaining satisfactory pictures of tissue preparations, and such other objects as approximate them in optical characteristics.

He calls attention to the fact that a specimen which has been made, *secundum artem*, and found to be satisfactory by white-cloud illumination or by lamp-light, will, notwithstanding, be very unsatisfactory when illuminated by the direct rays of the sun.

To escape some of the former disagreeable results, he says, in the use of direct sunlight, "it has heretofore been the practice to pass the solar pencil through a piece of ground glass. This plan is recommended in all the treatises on photo-micrography, and has hitherto been employed in the solar work done at the Army Medical Museum. The method is effectual in getting rid of the diffraction and interference phenomenon complained of; an image is obtained which is clear and satisfactory to

the eye looking down the tube, but it appears very weak on the screen and is sadly deficient in contrast. These faults are reproduced in photographs of objects thus illuminated, and, moreover, the time of exposure is enormously increased. Such pictures are decidedly inferior to those which can be obtained by the magnesium, or even by the calcium light, with which no ground glass is used.

"I desire now to call your attention to the fact that, in the course of some recent experiments, I have ascertained that the diffraction and interference phenomena above complained of, may be prevented by the use of a suitable condensing lens, even better than by the ground glass; that by this plan the exposure may be greatly diminished, say from three minutes for five hundred diameters, to a fraction of a second, and that the resulting pictures are not merely quite as free from diffraction and interference phenomena as the best that can be obtained when the ground glass is used, but are characterized by greater contrast and superior sharpness of definition.

"The details of my new method are as follows:—The microscope being placed on a shelf at the window of the dark room, and its body made horizontal, the achromatic condenser is illuminated by a solar pencil reflected from a heliostat upon a movable mirror outside the shutter and thence into the dark room, precisely as described in my original paper on photo-micrography (*American Journal of Science and Arts*, Sept., 1866). No ground glass is used, but instead a lens mounted in a suitable tube is fixed in the opening of the shutter through which the solar pencil enters. This lens is an achromatic combination, about two inches in transverse diameter and of about ten inches focal length. It is placed at such a distance from the achromatic condenser that the solar rays are brought to a focus and begin again to diverge before they reach the lowest glass of the achromatic condenser."

We wish we had space to follow out Dr. Woodward in the full elucidation of his plans. He generally employs an 1-8th of an inch objective, receiving the image on a piece of card-board, viewing it with both eyes, as in the case of an ordinary solar microscope.

"When all is satisfactory, I insert an ammonio-sulphate cell between the large lens and the achromatic condenser, and draw down the velvet hood, which prevents

leakage of light from about the microscope into the dark room; then going to the plate holder I make the final focussing in the usual way on the ground glass, or on plate glass with the help of a focussing glass, according to the nature of the object."

The selection of objectives suitable for photographic work, the use of the large condensing lens, the introduction of the ammonio-sulphate cell, the requisite time for the production of impressions, and other topics are fully discussed.

"It only remains to append some examples of the results attained by sunlight employed in this manner. In selecting a few negatives for this purpose, I have preferred to confine myself to those which represent normal tissues, magnified to the moderate extent of four or five hundred diameters. I have done so because I believe that the greatest practical results are to be anticipated from the reproduction of similar objects with like powers."

Dr. Woodward has sent us nine very beautiful micro-photographs representing sections of the kidney, ovaries, liver, striated muscular fibre, &c., all of the most beautiful character and of great clearness of definition.

In conclusion, Dr. Woodward expresses the hope that his work in this direction "may induce other microscopists, and especially those who are conducting original researches, to resort to photography as a means of bringing their results in a tangible form before their fellow-microscopists."

OUR BRETHREN IN CHICAGO.—We consider it no less a duty than a pleasure to call the attention of our New England physicians to the claims of our brethren in Chicago in what is to them a dire necessity. Those of us now in possession of our comfortable homes, our clothing, libraries, instruments and appliances, with our patients in their usual state of prosperity and our daily business moving quietly on, do not appreciate the fact that, from at least one hundred physicians of Chicago, of standing equal with our own, the means of comfort and the necessities of professional life have been suddenly snatched; the hard truth is forced upon us that many of our brethren have lost absolutely all they possessed, and

they find themselves at the opening of the inclement season, with their families around them, with nothing to clothe or feed them, and actually dependent on charity.

Not only do they find themselves thus destitute; the very implements of their handicraft have been taken from them. Still farther, the physicians who, a few weeks ago, possessed a prosperous clientelle, at the present day are forced to reflect that attendance on their patients must be, perforce, gratuitous or very insufficiently remunerated for the coming winter at least.

With this view of their situation before us, the condition of our brethren demands our attention. New England has freely contributed in the city and town subscriptions; but *we must do more*. New York has given over five thousand as a special professional contribution, and it can be accountable for as much more. St. Louis has sent about a thousand dollars, and Cincinnati nearly five hundred. We know that the funds will be wisely and honestly distributed, and that the charity which dire necessity obliges the Chicago physicians to ask, will barely save them from suffering during the coming winter.

We make an abstract from the proceedings of the Relief Committee appointed in New York. The Committee adopted the following resolution, at the suggestion of Dr. Eliot:—

"Resolved, That the following statement be sent to the medical journals for publication, after having been signed by the members of the committee.

"The undersigned have been appointed by the physicians of New York city an executive committee to receive money from the medical profession for physicians and medical students in Chicago and other places in the Northwest, who are destitute in consequence of the recent fires. The plan of collecting the necessary funds is to ask a subscription from every physician in New York city. They recommend that similar action be taken by the medical profession in other parts of the country. The committee intend to continue their meetings during the winter, and longer if necessary."

The touching letter from Dr. Hay, Secretary of the Medical Relief Committee of Chicago, is worthy of perusal.

No. 324 MICHIGAN AVENUE, CHICAGO,  
November 3, 1871.

Yours of the 1st instant, containing a certified check for \$2,000 for the relief of our suffering physicians, is just received. In the name of the committee and the beneficiaries of your noble charity, permit me again to tender you our most grateful acknowledgments.

Your former donation (together with the aid extended to us from our professional brethren in St. Louis and Cincinnati) has enabled us to relieve the most pressing needs of fifty-three physicians. Our list of applicants up to to-day numbers ninety-eight, and new names are daily added to the list.

We have divided our list into three sections, viz.: Those known to be irregular, or if regular, disreputable, we have rejected, and referred to the General Relief and Aid Society. Those not well known to us personally or by authentic reference have been reserved for investigation. Those whose character and condition were well known have been relieved immediately.

This relief list we have classified into three subdivisions:—1. Men with families who have lost both residence, office and practice, to whom sums of \$50.00 each have been voted. 2. Those whose offices alone have been destroyed, to whom we have awarded sums of \$25.00 respectively; and, 3d. Single men and young men without dependants, to whom sums of \$10.00 have been assigned. We have been able to duplicate these sums in some instances. This has enabled us to relieve fifty-three, and your last handsome donation will permit us to extend our relief list largely.

As it would be impossible to comprehend the magnitude of this calamity, it is equally impossible to imagine the courage with which our professional brethren meet it. In three different instances men who have grown gray in the profession and attained some of its highest honors, have asked, before accepting a check, "Is there not some one who needs this more than I do?" In one case a white-haired professor, who has lost many thousands, indeed his all, but had secured an appointment as District Physician to attend the poor at fifty dollars per month, said to me, "I will accept no more aid, I have now an income."

I write immediately to Wisconsin and Michigan for information regarding the sufferers there, and will write to you as soon as I receive replies.

Very truly yours,

WALTER HAY, M.D.

No less interesting is the circular of the New York Committee, which we give at their request. In order that members of the profession hereabouts may have the opportunity of sending means of relief to Chicago, the Editor of this JOURNAL will take charge of money, surgical instruments and books (all of which are imperatively needed), and will forward them, free of expense.

#### *To the Medical Profession of the United States.*

The terrible calamity which has recently fallen upon the city of Chicago and upon various portions of the Northwest, has awakened the sympathy of the world, and both money and material have been sent to the suffering districts with an abundance and alacrity which has never before been witnessed; but no one who has considered the extent of the losses, or the amount of suffering entailed, can feel any apprehension that the work of charity is likely to be overdone, nor, indeed, that it will be possible to fill the measure of the actual want. There ought to be no relaxation in these general measures of relief for many months to come, nor is it probable that there will be; but there is one class whose misfortunes appeal most especially to the members of our profession. More than a hundred physicians in Chicago, and probably as many more in other portions of the Northwest, have lost all they possessed. The intelligence received by us, from trustworthy sources, is of the most painful character; and it is with reluctance that we make public the fact that up to this moment seventy-seven physicians in Chicago alone have been driven to the necessity of placing their names upon the list of those requiring pecuniary aid. God forbid that we should delay to give them help. We beg you to reflect that the situation of these physicians, with their families, is peculiar. The laborer may find immediate employment at his usual wages; the merchant may buy and build upon his credit; the clergyman has his congregation, much less able to pay than formerly, but nevertheless responsible for his support. The physician has ordinarily none of these resources. With neither house nor furniture, horse, carriage, nor instruments, he must do what little he can, and wait the slow returns from a population reduced, like himself, almost or quite to beggary. Our calling is never a lucrative one, but in Chicago to-day it can hardly be expected to supply

the necessities of life, and perhaps not for a year to come.

In our opinion, these seventy-seven doctors, and probably as many more, will need from \$500 to \$1,000 each to carry them safely through the year, and to put them once more upon their feet. From \$50,000 to \$80,000 is our lowest estimate of what should be sent to the Chicago doctors' relief fund; with this money they may be placed upon salaries, and in return perform such public services among the sick and poor as may be required.

We have already received from the physicians of New York over \$5,000, of which sum \$4,000 has been sent to Chicago. The remainder is retained for the purpose of aiding the physicians of Wisconsin and Michigan, and will be forwarded to Chicago or elsewhere as soon as we receive information as to where it is especially needed. Many of the other large cities have sent in similar contributions. We have no means of knowing how much has been contributed, but we have no doubt the sum is totally inadequate to meet the exigencies of the case. It is proposed, therefore, to continue the organization of the Committee, and not to cease efforts during the winter, unless its services should seem to be no longer required.

To physicians living in scattered districts we take the liberty of suggesting organized action through county or other local associations. Those who prefer can send their contributions direct to Walter Hay, M.D., Secretary of the Chicago Medical Relief Com., No. 384 Michigan Av., Chicago; or to the Treasurer of this Committee, Samuel T. Hubbard, M.D., No. 27 West Ninth Street, New York. We earnestly hope that no physician in the United States will omit to contribute something, however small the amount may be, to this charity—in any way and through any channel they may choose—but that they all give, and that speedily. If our medical brethren knew only a few of the examples of individual suffering which have come to our knowledge, but which we do not feel at liberty to publish, their contributions would not be delayed.

Surgical instruments may be sent to the following surgical instrument-makers in this city, by whom they will be forwarded free of charge: George Tiemann & Co., 67 Chatham Street; Darrow & Co., 1227 Broadway; Otto & Reyniers, 64 Chatham Street; Shepard & Dudley (formerly Ford & Co.), 150 William Street; Stohlmann, Pfarre & Co., 107 East Twenty-eighth St.

Books will be received and forwarded by Wm. Wood & Co., No. 27 Great Jones St.

It may be necessary to add in explanation of the diversion of a portion of the funds originally intended only for the physicians of Chicago, that the probability of an appeal from the physicians of the burnt districts of Michigan and of Wisconsin determined the Committee to reserve a small portion for such an exigency: and further, that in consideration of the fact that the medical students of this city have given very liberally to this fund, it was determined to suggest to those having in charge the distribution of these charities, that they will not overlook the claims of medical students who may in the same manner have been left destitute.

FRANK H. HAMILTON, M.D., *Chairman.*

ALFRED E. PURDY, M.D., *Secretary.*

SAMUEL T. HUBBARD, M.D., *Treasurer.*

GEO. F. SHRADY, M.D.,

CHAR. McMILLAN, M.D.,

ED. S. DUNSTER, M.D.,

A. UNDERHILL, M.D.,

JOHN C. PETERS, M.D.,

F. A. CASTLE, M.D.,

F. A. BURRALL, M.D.

**RUSH MEDICAL COLLEGE.**—We commend to the friends of medical education the appeal sent by the committee appointed by the Alumni of Rush Medical College, of which Dr. T. D. Fitch is chairman. We regret that we have no space for the circular of the Trustees of the College; we however copy a portion:—

"For every donation of five hundred dollars the Trustees will establish a perpetual free scholarship, which shall bear the name of the donor, and which shall be conspicuously emblazoned on the wall of the lecture room. A certificate of this scholarship, engrossed on parchment, will be issued to the donor; which certificate shall secure to the bearer free tuition, and, when found qualified, free graduation. This certificate shall be perpetual in its operation; and thus the donor will have endowed for one student each year a free medical college.

WM. B. OGDEN, *Chairman.*

GRANT GOODRICH, *Secretary.*

*"An Appeal to the Alumni and Friends of the Rush Medical College, recently destroyed by fire, for aid to assist in its rebuilding:—*

"This College is among the oldest institutions of learning in the Northwest, having been in operation since 1843, at which time the region now tributary to Chicago was but sparsely populated and had little



wealth. During this time it has supplied a pressing need of this new country. It has educated a large number of young men, who are scattered through our whole country, worthily filling places of great usefulness and responsibility; and for this both themselves and the public are indebted, in a great measure, to the school in which they received their instruction. A large proportion of its students have been possessed of little save youth, hope, intelligence and determination. Many of these, having been generously aided by the College, have taken rank among the most substantial members of the profession. The Faculty at all times, since its organization, has been moved by an earnest desire to promote the best interests of the profession and the College. For this its members have labored faithfully and earnestly; they have met the pecuniary burden of the School from its foundation, and four years since they erected from their own resources, at an expense of \$70,000, the most ample and best appointed college building on this continent, and filled it with every necessary appliance for successful teaching, and the influence and usefulness of the School has steadily increased from year to year. But in a day, the College building, with all its contents, was swept away, along with a large part of the city, in which it stood a peer among other noble institutions of learning. The pecuniary loss of the Faculty, in the destruction of the College, is light when weighed against others they have sustained. A number have lost nearly everything, and all have suffered much. The College must be rebuilt. Its past history, its future promise for good, demand no less. Under the circumstances, it is unreasonable to expect the Faculty to do this unaided. The College is now in a condition to justify an appeal to its Alumni, and to society, for some return for the favors it has conferred upon both. There is, perhaps, no field of benevolence that offers a richer return than to provide adequate and easy opportunities for instruction to those who desire to become learned in the best means for assuaging pain and healing the sick.

"All donations may be remitted to Chas. T. Parkes, M.D., 462 Elston Av., Chicago, who has been elected treasurer for the fund. They will be thankfully acknowledged, and faithfully devoted to the rebuilding of the College."

RECURRENT MENTAL IRRITATION.—In striking contrast to the general tone of the press

throughout the country is a paragraph which we quote from the *Richmond and Louisville Medical Journal* of the current month. The spirit which rankles in the heart of the writer needs no comment at our hands; it is the feeling which caused the occurrence some years ago of an entertaining correspondence with Dr. Bowditch, of this city; the same sentiment, last June, was undoubtedly the cause of an unprovoked attack on Dr. Yandell, of Louisville, Editor of the *American Practitioner*, and should meet with contempt wherever it is shown.

"There is an interesting and very welcome reflection in connection with this fire. When Charleston and Columbia, S. C., were in flames; when poor, helpless widows and mourning, ruined orphans were fleeing for their lives; seeking safety, shelter, aye even bread, those were gala days in Chicago; there were bonfires and illuminations; military bands, with their blaring trumpets and exultant drums, were welcomed and cheered through the streets of that rejoicing city. What has been the recent chapter in American history? When that once beautiful and proud city of the lakes was wrapped in the gorgeous and fatal drapery of fire; when this modern city of the plains, like those of biblical memory, was being consumed by the fiery monster, whose lurid folds enwrapped and embraced it, does it appear that in the cities of the South there were retributive bonfires and rejoicings; that when the widow and the orphan were houseless and homeless, there were thousands exulting over their misery and ruin? No! a thousand times no! thanks be to God be it recorded here, that while these thousands at the South, even at that awful hour for Chicago, were being trampled upon, derided and persecuted, history cannot point to a single place, or a single hour, when the agonies of the people of Illinois were made the occasion for feasting and festivity; for rejoicing and for the display of those manifold exhibitions which bespeak the pleasure and gratification of an exultant people. On the contrary, the poor and destitute of the South sent on to Chicago portions of their daily bread; moiety saved from an enforced and bitter frugality. There has been no exultation; no rejoicing. There has been but one feeling; sympathy for a stricken multitude; anxiety to relieve their destitution; determination to put an end to their wants. It is a beautiful chapter in history. It is worthy of a permanent record."

## Medical Miscellany.

**DISEASES OF THE EYE DUE TO THE USE OF PETROLEUM.**—Prof. Paoli, in the *Giornale Veneto di Scien. Med.*, attributes a noted increase in asthenopia and certain forms of conjunctivitis, indicating congestion of the retina, to the use of petroleum, and advises a return to olive oil in moderator or Carcel lamps. The source of these troubles lies probably in the excess of yellow and red rays (the most heat-producing of the spectrum) in the light from kerosene.

**EFFECT OF TOBACCO SMOKING UPON CHILDREN.**—A skilful experimenter comes to the following conclusion on the toxic action of tobacco: 1st. The pernicious effects of tobacco upon children are incontestable. 2d. The use of tobacco causes pallor, chloro-anæmia, palpitation and troubles of the digestion. 3d. This anæmia is incurable as long as the habit is continued. 4th. Children addicted to tobacco are of inferior intelligence, and have a taste more or less pronounced for strong drink. 5th. Those who drop the habit before the production of any organic lesion recover perfectly.—*Gaz. Med. Ital.*, 1871.

**TRISMUS NASCENTIUM.**—Dr. J. Marion Sims has now ready for the press an illustrated monograph upon the etiology and treatment of "Trismus Nascentium," which will appear some time during the winter.

He takes the position that trismus nascentium is the result of a displacement of the occipital bone inwards, compressing the brain, or rather the medulla oblongata; and that in every case of trismus we have the parietal bones at the lambdoidal suture over-riding or elevated above the occipital bone; that is, the occipital bone is depressed. He claims that all that is necessary to relieve the little sufferer is to restore the occipital bone to its normal position, which may be readily done by placing the infant on its side, thus removing all pressure from the occipital bone.—*Atlanta Med. and Surg. Journal*.

**SUBCUTANEOUS INJECTIONS OF ARSENIUS ACID IN SKIN DISEASES.**—Dr. Lipp publishes, in the *Arch. für Dermat. und Syph.*, Nov. 3, 1869, two cases of psoriasis and three of chronic eczema, which were cured by hypodermic injections of arsenious acid. In the former, the result of the injections was satisfactory, after the internal use of Fowler's solution had failed. The cases of eczema are not so conclusive, as other means besides the injections were used. In the first case of psoriasis, eight grains of arsenious acid were injected in forty-eight days, and in the second, four grains in thirty-eight days. The author gives minute details respecting the phenomena observed during the injections, and states that he does not mean to infer from so few cases the superiority of the injections over the internal use of arsenic; but he merely observes that in favor of the former he might mention—the certainty of absorption, the non-interference with the organs of digestion, the small doses used, and the short treatment. As

quinine and other remedies are now frequently injected, a time will probably soon come when the stomach will rarely be troubled with medicinal substances.—*Ibid.*

**TO CORRESPONDENTS.**—Communications accepted:—*Ulcus Corneæ Serpens* and its Treatment.—On the Utility of Calomel in Infantile Intestinal Affections.

**BOOKS RECEIVED.**—*Pecundity, Fertility and Sterility.* By J. Matthews Duncan, A.M., M.D., L.R.C.S.E., &c. Second Edition, revised and enlarged. New York: Wm. Wood & Co. 1871. Pp. 498. (From James Campbell, Boston.)—*War Department. Surgeon-General's Office. Circular No. 3. Report of Surgical Cases in the Army during the past five years.* By Geo. A. Otis, Assist. Surg. U. S. Army. 4to. Pp. 296.—*Report to the Surgeon-General of the United States Army on an Improved Method of Photographing Histological Preparations by Sunlight.* With nine mounted photographs representing Normal Tissues. By Assistant Surgeon J. J. Woodward, U. S. Army. 4to.—*Modern Medical Therapeutics: A Compendium of Recent Formulae, and Specific Therapeutical Directions.* By Geo. H. Naepey, A.M., M.D., &c. Second Edition, revised and improved. Philadelphia: S. W. Butler, M.D. 1871. Pp. 496.—*The Physician's Daily Pocket Record; containing a Visiting List, many useful Memoranda Tables, &c.* By S. W. Butler, M.D.

**PAMPHLETS RECEIVED.**—*On Chloroform in its Medical-Legal Bearings.* By Charles Kidd, M.D., Member of the Royal College of Surgeons, England, &c. Edinburgh. Pp. 12.—*Transactions of the American Otolological Society. Fourth Annual Meeting, Newport, R. I., July 19, 1871.* Pp. 75.—*Transactions of the Medical Society of the State of Pennsylvania, at its twenty-second Annual Session, June, 1871.* Pp. 501.

*Deaths in seventeen Cities and Towns of Massachusetts for the week ending Nov. 25, 1871.*

Cities and Towns.	No. of Deaths.	Prevalent Diseases.
Boston . . . . .	111	Consumption . . . . . 46
Charlestown . . . . .	10	Pneumonia . . . . . 15
Worcester . . . . .	25	Typhoid fever . . . . . 13
Lowell . . . . .	13	Croup and Diphtheria . . . . . 13
Milford . . . . .	6	Scarlet fever . . . . . 6
Chelsea . . . . .	6	
Cambridge . . . . .	7	
Salem . . . . .	4	
Lawrence . . . . .	11	
Springfield . . . . .	7	
Lynn . . . . .	17	
Gloucester . . . . .	5	
Fitchburg . . . . .	3	
Newburyport . . . . .	6	
Fall River . . . . .	12	
Haverhill . . . . .	2	
Holyoke . . . . .	4	

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Holyoke reports two deaths from smallpox.

GEORGE DERRY, M.D.  
Secretary of State Board of Health.

**DEATHS IN BOSTON for the week ending Saturday, Nov. 25th, 111.** Males, 51; females, 60. Accident, 2—apoplexy, 2—anaemia, 1—inflammation of the bowels, 1—bronchitis, 3—inflammation of the brain, 2—congestion of the brain, 2—disease of the brain, 5—burned, 1—cancer, 2—cholera infantum, 1—consumption, 15—convulsions, 5—croup, 4—debility, 1—diarrhoea, 2—dropsy, 3—dropsy of brain, 3—diphtheria, 1—erysipelas, 1—typhoid fever, 7—disease of the heart, 9—intemperance, 1—disease of the kidneys, 3—congestion of the lungs, 3—inflammation of the lungs, 1—marasmus, 5—old age, 4—paralysis, 2—premature birth, 5—peritonitis, 2—purpura hemorrhagica, 1—scrofula, 1—teething, 1—unknown, 3.

Under 5 years of age, 42—between 5 and 20 years, 11—between 20 and 40 years, 21—between 40 and 60 years, 18—above 60 years, 19. Born in the United States, 70—Ireland, 24—other places, 17